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| | | |
|---|---|---|
| NEWS 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS 2 | JAN 02 | STN pricing information for 2008 now available |
| NEWS 3 | JAN 16 | CAS patent coverage enhanced to include exemplified prophetic substances |
| NEWS 4 | JAN 28 | USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats |
| NEWS 5 | JAN 28 | MARPAT searching enhanced |
| NEWS 6 | JAN 28 | USGENE now provides USPTO sequence data within 3 days of publication |
| NEWS 7 | JAN 28 | TOXCENTER enhanced with reloaded MEDLINE segment |
| NEWS 8 | JAN 28 | MEDLINE and LMEDLINE reloaded with enhancements |
| NEWS 9 | FEB 08 | STN Express, Version 8.3, now available |
| NEWS 10 | FEB 20 | PCI now available as a replacement to DPCI |
| NEWS 11 | FEB 25 | IFIREF reloaded with enhancements |
| NEWS 12 | FEB 25 | IMSPRODUCT reloaded with enhancements |
| NEWS 13 | FEB 29 | WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification |
| NEWS 14 | MAR 31 | IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats |
| NEWS 15 | MAR 31 | CAS REGISTRY enhanced with additional experimental spectra |
| NEWS 16 | MAR 31 | CA/CAplus and CASREACT patent number format for U.S. applications updated |
| NEWS 17 | MAR 31 | LPCI now available as a replacement to LDPCI |
| NEWS 18 | MAR 31 | EMBASE, EMBAL, and LEMBASE reloaded with enhancements |
| NEWS 19 | APR 04 | STN AnaVist, Version 1, to be discontinued |
| NEWS 20 | APR 15 | WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats |
| NEWS 21 | APR 28 | EMBASE Controlled Term thesaurus enhanced |
| NEWS 22 | APR 28 | IMSRESEARCH reloaded with enhancements |
| NEWS 23 | MAY 30 | INPAFAMDB now available on STN for patent family searching |
| NEWS 24 | MAY 30 | DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option |
| NEWS 25 | JUN 06 | EPFULL enhanced with 260,000 English abstracts |
| NEWS 26 | JUN 06 | KOREAPAT updated with 41,000 documents |
| NEWS 27 | JUN 13 | USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications |
| NEWS 28 | JUN 19 | CAS REGISTRY includes selected substances from web-based collections |
| NEWS 29 | JUN 25 | CA/CAplus and USPAT databases updated with IPC |

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                  reclassification data
 NEWS 30  JUN 30  AEROSPACE enhanced with more than 1 million U.S.
                  patent records
 NEWS 31  JUN 30  EMBASE, EMBAL, and LEMBASE updated with additional
                  options to display authors and affiliated
                  organizations
 NEWS 32  JUN 30  STN on the Web enhanced with new STN AnaVist
                  Assistant and BLAST plug-in
 NEWS 33  JUN 30  STN AnaVist enhanced with database content from EPFULL

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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=> file materials
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                                                         ENTRY    SESSION
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FILE 'CERAB' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'CIN' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'CIVILENG' ENTERED AT 08:07:07 ON 17 JUL 2008


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FILE 'COPPERLIT' ENTERED AT 08:07:07 ON 17 JUL 2008


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FILE 'EMA' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'ENERGY' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'HEALSAFE' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'IFIPAT' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'INIS' ACCESS NOT AUTHORIZED

FILE 'INSPEC' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'INSPHYS' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'MATBUS' ENTERED AT 08:07:07 ON 17 JUL 2008

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FILE 'PROMT' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'RAPRA' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'RDISCLOSURE' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'SCISEARCH' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'SOLIDSTATE' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'TEMA' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'TEXTILETECH' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'TRIBO' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'USPATFULL' ENTERED AT 08:07:07 ON 17 JUL 2008


FILE 'USPATOLD' ENTERED AT 08:07:07 ON 17 JUL 2008

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FILE 'WELDASEARCH' ENTERED AT 08:07:07 ON 17 JUL 2008
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FILE 'WSCA' ENTERED AT 08:07:07 ON 17 JUL 2008
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FILE 'WTEXTILES' ENTERED AT 08:07:07 ON 17 JUL 2008
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=> s flexible (L) polyurethane (L) diol (L) triol
  42 FILES SEARCHED...
L1        4054 FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL

=> s l1 (L) hydrodroformylation (L) raney (2w) nickel
L2           0 L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL

=> s l1 (L) hydroformylation (L) (raney (2w) nickel)
  41 FILES SEARCHED...
L3           8 L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)

=>  d l3 1-8 ibib abs

L3   ANSWER 1 OF 8  USPATFULL on STN
ACCESSION NUMBER:       2006:227438  USPATFULL
TITLE:                  Aldehyde and alcohol compositions derived from seed
                        oils
INVENTOR(S):            Lysenko, Zenon, Midland, MI, UNITED STATES
                        Morrison, Donald L., Fort Collins, CO, UNITED STATES
                        Babb, David A., Lake Jackson, TX, UNITED STATES
                        Bunning, Donald L., South Charleston, WV, UNITED STATES
                        Derstine, Christopher W., Winfield, WV, UNITED STATES
                        Gilchrist, James H., Dunbar, WV, UNITED STATES
                        Jouett, H. Ray, Houston, TX, UNITED STATES
                        Kanel, Jeffrey S., Hurricane, WV, UNITED STATES
                        Olson, Kurt D., Cross Lanes, WV, UNITED STATES
                        Peng, Wei-Jun, Hurricane, WV, UNITED STATES
                        Philips, Joe D., Lake Jacksosn, TX, UNITED STATES
                        Roesch, Brian M., Cross Lanes, WV, UNITED STATES
                        Sanders, Aaron W., Missouri City, TX, UNITED STATES
                        Schrock, Alan K., Lake Jackson, TX, UNITED STATES
                        Thomas, Pulikkottil J., Midland, MI, UNITED STATES

                             NUMBER        KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20060193802     A1   20060831
APPLICATION INFO.:      US 2004-551854     A1   20040422  (10)
                        WO 2004-US12246         20040422
                                                20050930  PCT 371 date

                               NUMBER         DATE
                        ------------------ --------
PRIORITY INFORMATION:   US 2003-465663P    20030425 (60)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
```

LEGAL REPRESENTATIVE: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1284
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol {mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2004:89059 USPATFULL
TITLE: Flexible emissive coatings for elastomer substrates
INVENTOR(S): Halladay, James R., Harborcreek, PA, UNITED STATES
Krakowski, Frank J., Erie, PA, UNITED STATES
Caster, Kenneth C., Cary, NC, UNITED STATES
Troughton, Ernest Barritt, JR., Raleigh, NC, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20040068036 | A1 | 20040408 | |
| | US 6777026 | B2 | 20040817 | |
| APPLICATION INFO.: | US 2002-265576 | A1 | 20021007 | (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Miles B. Dearth, 111 Lord Drive, P.O. Box 8012, Cary, NC, 27512-8012
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 3618
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Emissive coatings for flexible substrates, preferably elastomers or elastomers bonded to metal are disclosed The coating composition is formed by combining parts (a) and (b) where part (a) comprises an

organic solution or aqueous dispersion of a functional group containing polymer or copolymer and thermal conductive filler; and part (b) comprises a liquid curing component, for example a poly isocyanate, a carbodiimide, or an amino resin. The coating compounds can be applied to an substrate either before or after the substrate has been vulcanized. The coatings can be cured at ambient temperatures and provide heat dissipation over long term service at elevated temperatures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 8 USPATFULL on STN
ACCESSION NUMBER: 97:45055 USPATFULL
TITLE: Hydroxy-functional triamine catalyst compositions for polyurethane production
INVENTOR(S): Van Court Carr, Richard, Allentown, PA, United States
Listemann, Mark L., Whitehall, PA, United States
Savoca, Ann C. L., Bernville, PA, United States
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5633293 | | 19970527 | |
| APPLICATION INFO.: | US 1995-565518 | | 19951130 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Gorr, Rachel
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 641
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of 0-50 mole % compound I and 50-100 mole % compound II: ##STR1## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkly, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 2 to 8.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 8 USPATFULL on STN
ACCESSION NUMBER: 90:48873 USPATFULL
TITLE: Trimethylolheptanes and use thereof
INVENTOR(S): Omatsu, Toshihiro, Kurashiki, Japan
Tokitoh, Yasuo, Kurashiki, Japan
Yoshimura, Noriaki, Kurashiki, Japan
Ishida, Masao, Kurashiki, Japan
Yano, Makoto, Kurashiki, Japan
Hirai, Koji, Kurashiki, Japan
Matsumoto, Yoichi, Kamisu, Japan
Kubo, Keiji, Kurashiki, Japan
PATENT ASSIGNEE(S): Kurary Company, Ltd., Kurashiki, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4935488 | | 19900619 |
| APPLICATION INFO.: | US 1989-340791 | | 19890420 (7) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | JP 1988-99115 | 19880420 |
| | JP 1988-127678 | 19880524 |
| | JP 1989-12666 | 19890120 |
| | JP 1989-12667 | 19890120 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Acquah, S. A.
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 1724
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel trimethylolheptanes having three highly reactive hydroxyl groups are provided. They are useful as raw materials for the production of polyesters for use in or as raw materials or modifiers for paints, inks, adhesives, coating compositions and molding resins. Uses for the trimethylolheptanes are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 8 USPATOLD on STN
ACCESSION NUMBER: 1972:61906 USPATOLD
TITLE: DIACID BRIDGED RING COMPOUNDS
INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3646132 | A | 19720229 |
| APPLICATION INFO.: | US 1969-846251 | | 19690701 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: WEINBERGER, LORRAINE A
ASSISTANT EXAMINER: GLEIMAN, E J
LINE COUNT: 1678
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 8 USPATOLD on STN
ACCESSION NUMBER: 1970:4861 USPATOLD

TITLE: NORBORNANE DIISOCYANATES
INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3492330 | A | 19700127 |
| APPLICATION INFO.: | US 1966-520298 | | 19660101 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: PARKER, CHARLES B
LINE COUNT: 1827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 8 USPATOLD on STN
ACCESSION NUMBER: 1966:16685 USPATOLD
TITLE: Electrical resistive polyurethane resin from a mixture of polyols containing nonadecanediol
INVENTOR(S): DE WITT ELMER J
MURPHY WALTER T

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3243414 | A | 19660329 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1963-270152 | 19630403 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
LINE COUNT: 807
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 8 USPAT2 on STN
ACCESSION NUMBER: 2004:89059 USPAT2
TITLE: Flexible emissive coatings for elastomer substrates
INVENTOR(S): Halladay, James R., Harborcreek, PA, United States
Krakowski, Frank J., Erie, PA, United States
Caster, Kenneth C., Cary, NC, United States
Troughton, Jr., Ernest Barritt, Raleigh, NC, United States
PATENT ASSIGNEE(S): Lord Corporation, Cary, NC, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6777026 | B2 | 20040817 |

APPLICATION INFO.: US 2002-265576 20021007 (10)
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Cameron, Erma
LEGAL REPRESENTATIVE: Dearth, Miles B.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 3579
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Emissive coatings for flexible substrates, preferably elastomers or elastomers bonded to metal are disclosed The coating composition is formed by combining parts (a) and (b) where part (a) comprises an organic solution or aqueous dispersion of a functional group containing polymer or copolymer and thermal conductive filler; and part (b) comprises a liquid curing component, for example a poly isocyanate, a carbodiimide, or an amino resin. The coating compounds can be applied to an substrate either before or after the substrate has been vulcanized. The coatings can be cured at ambient temperatures and provide heat dissipation over long term service at elevated temperatures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

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FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008
L1 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)

=> l1 (L) (raney (2w) nickel)
L1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l1 (L) (raney (2w) nickel)
L4 57 L1 (L) (RANEY (2W) NICKEL)

=> s l4 not l3
L5 49 L4 NOT L3

=> s l5 and ratio
L6 45 L5 AND RATIO

=> s l6 and (ethanol or methanol or propanol)
42 FILES SEARCHED...
L7 33 L6 AND (ETHANOL OR METHANOL OR PROPANOL)

=> d l7 1-10 ibib abs

L7 ANSWER 1 OF 33 USPATFULL on STN
ACCESSION NUMBER: 2007:201150 USPATFULL
TITLE: Bioplastics, monomers thereof, and processes for the preparation thereof from agricultural feedstocks
INVENTOR(S): Narine, Suresh, Alberta, CANADA
Sporns, Peter, Alberta, CANADA
Yue, Jin, Alberta, CANADA

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20070175793 | A1 | 20070802 | |
| APPLICATION INFO.: | US 2007-649620 | A1 | 20070104 | (11) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2006-755770P | 20060104 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 87 Drawing Page(s)
LINE COUNT: 3864
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 33 USPATFULL on STN
ACCESSION NUMBER: 2005:264715 USPATFULL
TITLE: Activatable material and method of forming and using same
INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES
Harthcock, Matthew, Oakland Township, MI, UNITED STATES
Sendijarevic, Aisa, Troy, MI, UNITED STATES
Sendijarevic, Vahid, Troy, MI, UNITED STATES
PATENT ASSIGNEE(S): L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20050230027 | A1 | 20051020 | |
| APPLICATION INFO.: | US 2005-89712 | A1 | 20050325 | (11) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2004-622442P | 20041027 (60) |

| | |
|---|---|
| | US 2004-562663P 20040415 (60) |
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210, PONTIAC, MI, 48342, US |
| NUMBER OF CLAIMS: | 20 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 4 Drawing Page(s) |
| LINE COUNT: | 1354 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 33 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2003:325213 USPATFULL |
| TITLE: | HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR PRODUCTION |
| INVENTOR(S): | Super, Michael S., Oakdale, PA, UNITED STATES<br>Steppan, David D., Gibsonia, PA, UNITED STATES<br>Slack, William E., Moundsville, WV, UNITED STATES<br>Potts, Bruce H., Beaver, PA, UNITED STATES<br>Hurley, Michael F., Pittsburgh, PA, UNITED STATES |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20030229195 | A1 | 20031211 | |
| | US 6765080 | B2 | 20040720 | |
| APPLICATION INFO.: | US 2002-165297 | A1 | 20020606 | (10) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205 | | | |
| NUMBER OF CLAIMS: | 26 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| LINE COUNT: | 1305 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 33 USPATFULL on STN
ACCESSION NUMBER: 2002:109128 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX, United States 77079

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6388010 | B1 | 20020514 |
| APPLICATION INFO.: | US 2000-491017 | | 20000125 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May 1998, now patented, Pat. No. US 6060560

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 33 USPATFULL on STN
ACCESSION NUMBER: 2000:57854 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|

| | | |
|---|---|---|
| PATENT INFORMATION: | US 6060560 | 20000509 |
| APPLICATION INFO.: | US 1998-73666 | 19980506 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Buttner, David
LEGAL REPRESENTATIVE: Haas, Donald F.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2129
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 6 OF 33 USPATFULL on STN
ACCESSION NUMBER: 1998:72697 USPATFULL
TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom
INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States
Meltzer, A. Donald, Brecksville, OH, United States
Suddaby, Brian R., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5770674 | | 19980623 |
| APPLICATION INFO.: | US 1996-744037 | | 19961105 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed on 7 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 15

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 7 OF 33 USPATFULL on STN
ACCESSION NUMBER: 1998:7110 USPATFULL
TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5710192 | | 19980120 | |
| APPLICATION INFO.: | US 1996-724940 | | 19961002 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 8 OF 33 USPATFULL on STN

ACCESSION NUMBER: 93:69964 USPATFULL
TITLE: Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5239038 | | 19930824 |
| APPLICATION INFO.: | US 1989-442805 | | 19891129 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 600
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a polyisocyanate prepolymer prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 33 USPATFULL on STN
ACCESSION NUMBER: 93:48632 USPATFULL
TITLE: Polyurea rim systems
INVENTOR(S): Slack, William E., Moundsville, WV, United States
Kratz, Mark R., Hannibal, OH, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5219973 | | 19930615 |
| APPLICATION INFO.: | US 1990-623469 | | 19901207 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a RIM process and an isocyanate reactive composition for use therein. The isocyanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 10 OF 33 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 92:78648 USPATFULL | | |
| TITLE: | Polyurea rim systems having improved flow properties and containing an organic cyclic carbonate | | |
| INVENTOR(S): | Nodelman, Neil H., Pittsburgh, PA, United States | | |
| PATENT ASSIGNEE(S): | Miles Inc., Pittsburgh, PA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 5149458 | | 19920922 |
| APPLICATION INFO.: | US 1991-686555 | | 19910417 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1990-546078, filed on 29 Jun 1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Bleutge, John C. | | |
| ASSISTANT EXAMINER: | Krass, Frederick | | |
| LEGAL REPRESENTATIVE: | Gil, Joseph C. | | |
| NUMBER OF CLAIMS: | 3 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 623 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB,

```
     CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF,
     EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG,
     METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL
     2008
L1          4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2             0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3             8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4            57 S L1 (L) (RANEY (2W) NICKEL)
L5            49 S L4 NOT L3
L6            45 S L5 AND RATIO
L7            33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)

=> l1 and foam
L1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l1 and foam
L8          2442 L1 AND FOAM

=> s l8 and (raney (2w) nickel) and ratio
  41 FILES SEARCHED...
L9            54 L8 AND (RANEY (2W) NICKEL) AND RATIO

=> s l9 and (methanol or ethanol or propanol)
L10           42 L9 AND (METHANOL OR ETHANOL OR PROPANOL)

=> s l10 not l3
L11           36 L10 NOT L3

=> d l11 1-10 ibib abs

L11  ANSWER 1 OF 36  USPATFULL on STN
ACCESSION NUMBER:       2007:201150  USPATFULL
TITLE:                  Bioplastics, monomers thereof, and processes for the
                        preparation thereof from agricultural feedstocks
INVENTOR(S):            Narine, Suresh, Alberta, CANADA
                        Sporns, Peter, Alberta, CANADA
                        Yue, Jin, Alberta, CANADA

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20070175793     A1   20070802
APPLICATION INFO.:      US 2007-649620     A1   20070104  (11)

                               NUMBER        DATE
                        ------------------ --------
PRIORITY INFORMATION:   US 2006-755770P    20060104 (60)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
LEGAL REPRESENTATIVE:   DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET,
                        SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS:       40
EXEMPLARY CLAIM:        1
NUMBER OF DRAWINGS:     87 Drawing Page(s)
LINE COUNT:             3864
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 2 OF 36 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2005:264715 USPATFULL |
| TITLE: | Activatable material and method of forming and using same |
| INVENTOR(S): | Kassa, Abraham, Shelby Township, MI, UNITED STATES<br>Harthcock, Matthew, Oakland Township, MI, UNITED STATES<br>Sendijarevic, Aisa, Troy, MI, UNITED STATES<br>Sendijarevic, Vahid, Troy, MI, UNITED STATES |
| PATENT ASSIGNEE(S): | L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. corporation) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20050230027 | A1 | 20051020 | |
| APPLICATION INFO.: | US 2005-89712 | A1 | 20050325 | (11) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2004-622442P | 20041027 (60) |
| | US 2004-562663P | 20040415 (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210, PONTIAC, MI, 48342, US |
| NUMBER OF CLAIMS: | 20 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 4 Drawing Page(s) |
| LINE COUNT: | 1354 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 36 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2003:325213 USPATFULL |
| TITLE: | HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR PRODUCTION |

INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES
Steppan, David D., Gibsonia, PA, UNITED STATES
Slack, William E., Moundsville, WV, UNITED STATES
Potts, Bruce H., Beaver, PA, UNITED STATES
Hurley, Michael F., Pittsburgh, PA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 20030229195 | A1 | 20031211 |
| | US 6765080 | B2 | 20040720 |
| APPLICATION INFO.: | US 2002-165297 | A1 | 20020606 (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1305
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 4 OF 36 USPATFULL on STN
ACCESSION NUMBER: 2002:109128 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX, United States 77079

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6388010 | B1 | 20020514 |
| APPLICATION INFO.: | US 2000-491017 | | 20000125 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May 1998, now patented, Pat. No. US 6060560

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1852

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 36 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2000:57854 USPATFULL |
| TITLE: | Polyurethane compositions made from hydroxy-terminated polydiene polymers |
| INVENTOR(S): | St. Clair, David John, Houston, TX, United States |
| PATENT ASSIGNEE(S): | Shell Oil Company, Houston, TX, United States (U.S. corporation) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6060560 | | 20000509 | |
| APPLICATION INFO.: | US 1998-73666 | | 19980506 | (9) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 | (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Buttner, David |
| LEGAL REPRESENTATIVE: | Haas, Donald F. |
| NUMBER OF CLAIMS: | 27 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 1 Drawing Figure(s); 1 Drawing Page(s) |
| LINE COUNT: | 2129 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one

or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 36 USPATFULL on STN
ACCESSION NUMBER: 1998:72697 USPATFULL
TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom
INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States
Meltzer, A. Donald, Brecksville, OH, United States
Suddaby, Brian R., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5770674 | | 19980623 |
| APPLICATION INFO.: | US 1996-744037 | | 19961105 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed on 7 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 36 USPATFULL on STN
ACCESSION NUMBER: 1998:7110 USPATFULL
TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5710192 | | 19980120 | |
| APPLICATION INFO.: | US 1996-724940 | | 19961002 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 36 USPATFULL on STN
ACCESSION NUMBER: 96:87650 USPATFULL
TITLE: Hydroxy-functional triamine catalyst compositions for the production of polyurethanes
INVENTOR(S): Klotz, Herbert C., Allentown, PA, United States
Lassila, Kevin R., Allentown, PA, United States
Listemann, Mark L., Whitehall, PA, United States
Minnich, Kristen E., Allentown, PA, United States
Savoca, Ann C. L., Bernville, PA, United States
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5559161 | | 19960924 | |
| APPLICATION INFO.: | US 1994-198925 | | 19940218 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 598
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for preparing a polyurethane foam which comprises

reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of a compound of structure I ##STR1## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkyl, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 1 to 8

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 36 USPATFULL on STN
ACCESSION NUMBER: 96:36599 USPATFULL
TITLE: Hydroxy and amino functional pyrrolizidine catalyst compositions for the production of polyurethanes
INVENTOR(S): Carr, Richard V. C., Allentown, PA, United States
Lassila, Kevin R., Allentown, PA, United States
Listemann, Mark L., Whitehall, PA, United States
Mercando, Lisa A., Pennsburg, PA, United States
Minnich, Kristen E., Allentown, PA, United States
Savoca, Ann C. L., Bernville, PA, United States
Wressell, Amy L., Allentown, PA, United States
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5512603 | | 19960430 | |
| APPLICATION INFO.: | US 1994-199396 | | 19940222 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 500
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, and

R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 36 USPATFULL on STN
ACCESSION NUMBER: 94:99905 USPATFULL
TITLE: Preparation of compact or cellular elastomers containing urethane and urea groups, and moldings

| | |
|---|---|
| | produced therefrom |
| INVENTOR(S): | Hinz, Werner, Frankenthal, Germany, Federal Republic of<br>Maletzko, Christian, Mannheim, Germany, Federal Republic of<br>Becker, Johannes, Ludwigshafen, Germany, Federal Republic of<br>Matzke, Guenter, Ketsch, Germany, Federal Republic of |
| PATENT ASSIGNEE(S): | BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5364852 | | 19941115 | |
| APPLICATION INFO.: | US 1993-53759 | | 19930429 | (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1992-4218791 | 19920606 |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Seidleck, James J. |
| ASSISTANT EXAMINER: | Critharis, Mary |
| LEGAL REPRESENTATIVE: | Golota, Mary E. |
| NUMBER OF CLAIMS: | 11 |
| EXEMPLARY CLAIM: | 1 |
| LINE COUNT: | 1043 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compact or cellular elastomers containing urethane and urea groups are prepared by reacting

a) at least one organic and/or modified organic polyisocyanate

b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,

c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of

d) catalysts and, if desired,

e) blowing agents,

f) auxiliaries and/or

g) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB,

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     CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF,
     EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG,
     METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL
     2008
L1          4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2             0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3             8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4            57 S L1 (L) (RANEY (2W) NICKEL)
L5            49 S L4 NOT L3
L6            45 S L5 AND RATIO
L7            33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
L8          2442 S L1 AND FOAM
L9            54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L10           42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
L11           36 S L10 NOT L3

=> s flexible (L) polyurethane (L) foam (L) diol (L) triol (L) mixture
  28 FILES SEARCHED...
L12        2320 FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIXTUR
                E

=> s l12 and (methanol or ethanol or propanol) and (raney (2w) nickel)
  41 FILES SEARCHED...
L13          43 L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NICKE
                L)

=> d l13 1-10 ibib abs

L13  ANSWER 1 OF 43  USPATFULL on STN
ACCESSION NUMBER:       2007:201150  USPATFULL
TITLE:                  Bioplastics, monomers thereof, and processes for the
                        preparation thereof from agricultural feedstocks
INVENTOR(S):            Narine, Suresh, Alberta, CANADA
                        Sporns, Peter, Alberta, CANADA
                        Yue, Jin, Alberta, CANADA

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20070175793     A1   20070802
APPLICATION INFO.:      US 2007-649620     A1   20070104  (11)

                               NUMBER        DATE
                        ------------------ --------
PRIORITY INFORMATION:   US 2006-755770P    20060104 (60)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
LEGAL REPRESENTATIVE:   DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET,
                        SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS:       40
EXEMPLARY CLAIM:        1
NUMBER OF DRAWINGS:     87 Drawing Page(s)
LINE COUNT:             3864
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention relates generally to polymers and monomers derived
       from agricultural feedstocks, and more particularly to methods for the
       production of monomers from renewable agricultural resources such as
       feedstocks, for example canola, flax and tallow, and polymers, in
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particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 2 OF 43 USPATFULL on STN

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2006:227438 USPATFULL | | | |
| TITLE: | Aldehyde and alcohol compositions derived from seed oils | | | |
| INVENTOR(S): | Lysenko, Zenon, Midland, MI, UNITED STATES<br>Morrison, Donald L., Fort Collins, CO, UNITED STATES<br>Babb, David A., Lake Jackson, TX, UNITED STATES<br>Bunning, Donald L., South Charleston, WV, UNITED STATES<br>Derstine, Christopher W., Winfield, WV, UNITED STATES<br>Gilchrist, James H., Dunbar, WV, UNITED STATES<br>Jouett, H. Ray, Houston, TX, UNITED STATES<br>Kanel, Jeffrey S., Hurricane, WV, UNITED STATES<br>Olson, Kurt D., Cross Lanes, WV, UNITED STATES<br>Peng, Wei-Jun, Hurricane, WV, UNITED STATES<br>Philips, Joe D., Lake Jacksosn, TX, UNITED STATES<br>Roesch, Brian M., Cross Lanes, WV, UNITED STATES<br>Sanders, Aaron W., Missouri City, TX, UNITED STATES<br>Schrock, Alan K., Lake Jackson, TX, UNITED STATES<br>Thomas, Pulikkottil J., Midland, MI, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 20060193802 | A1 | 20060831 | |
| APPLICATION INFO.: | US 2004-551854 | A1 | 20040422 | (10) |
| | WO 2004-US12246 | | 20040422 | |
| | | | 20050930 | PCT 371 date |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2003-465663P | | 20030425 (60) | |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US | | | |
| NUMBER OF CLAIMS: | 34 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 1 Drawing Page(s) | | | |
| LINE COUNT: | 1284 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition

derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol {mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 43 USPATFULL on STN
ACCESSION NUMBER: 2005:264715 USPATFULL
TITLE: Activatable material and method of forming and using same
INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES
Harthcock, Matthew, Oakland Township, MI, UNITED STATES
Sendijarevic, Aisa, Troy, MI, UNITED STATES
Sendijarevic, Vahid, Troy, MI, UNITED STATES
PATENT ASSIGNEE(S): L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 20050230027 | A1 | 20051020 |
| APPLICATION INFO.: | US 2005-89712 | A1 | 20050325 (11) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2004-622442P | 20041027 (60) |
| | US 2004-562663P | 20040415 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210, PONTIAC, MI, 48342, US
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 1354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 43 USPATFULL on STN
ACCESSION NUMBER: 2003:325213 USPATFULL

TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR PRODUCTION
INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES
Steppan, David D., Gibsonia, PA, UNITED STATES
Slack, William E., Moundsville, WV, UNITED STATES
Potts, Bruce H., Beaver, PA, UNITED STATES
Hurley, Michael F., Pittsburgh, PA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 20030229195 | A1 | 20031211 |
| | US 6765080 | B2 | 20040720 |
| APPLICATION INFO.: | US 2002-165297 | A1 | 20020606 (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1305
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 43 USPATFULL on STN
ACCESSION NUMBER: 2002:109128 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX, United States 77079

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6388010 | B1 | 20020514 |
| APPLICATION INFO.: | US 2000-491017 | | 20000125 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May 1998, now patented, Pat. No. US 6060560

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 43 USPATFULL on STN
ACCESSION NUMBER: 2000:57854 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 6060560 | | 20000509 | |
| APPLICATION INFO.: | US 1998-73666 | | 19980506 | (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Buttner, David
LEGAL REPRESENTATIVE: Haas, Donald F.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2129
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional

sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 43 USPATFULL on STN
ACCESSION NUMBER: 1999:78786 USPATFULL
TITLE: Weatherable resilient polyurethane foams
INVENTOR(S): St. Clair, David John, Houston, TX, United States
Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5922781 | | 19990713 | |
| APPLICATION INFO.: | US 1998-81559 | | 19980519 | (9) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 1997-47520P | 19970523 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Foelak, Morton
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a weatherable polyurethane foam produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aliphatic or cycloaliphatic polyisocyanate, and a stabilizer. The polydiene diol foams have excellent stability under sunlight exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 43 USPATFULL on STN
ACCESSION NUMBER: 1998:72697 USPATFULL
TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom
INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States
Meltzer, A. Donald, Brecksville, OH, United States
Suddaby, Brian R., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5770674 | | 19980623 | |
| APPLICATION INFO.: | US 1996-744037 | | 19961105 | (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed on 7 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 9 OF 43 USPATFULL on STN
ACCESSION NUMBER: 1998:7110 USPATFULL
TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5710192 | | 19980120 | |
| APPLICATION INFO.: | US 1996-724940 | | 19961002 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic

polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 10 OF 43 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 97:45055 USPATFULL | | |
| TITLE: | Hydroxy-functional triamine catalyst compositions for polyurethane production | | |
| INVENTOR(S): | Van Court Carr, Richard, Allentown, PA, United States<br>Listemann, Mark L., Whitehall, PA, United States<br>Savoca, Ann C. L., Bernville, PA, United States | | |
| PATENT ASSIGNEE(S): | Air Products and Chemicals, Inc., Allentown, PA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 5633293 | | 19970527 |
| APPLICATION INFO.: | US 1995-565518 | | 19951130 (8) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Gorr, Rachel | | |
| LEGAL REPRESENTATIVE: | Leach, Michael, Marsh, William F. | | |
| NUMBER OF CLAIMS: | 21 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 641 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of 0-50 mole % compound I and 50-100 mole % compound II: ##STR1## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkly, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 2 to 8.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

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FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008

| | | | |
|---|---|---|---|
| L1 | 4054 | S | FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL |
| L2 | 0 | S | L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL |
| L3 | 8 | S | L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL) |
| L4 | 57 | S | L1 (L) (RANEY (2W) NICKEL) |
| L5 | 49 | S | L4 NOT L3 |
| L6 | 45 | S | L5 AND RATIO |
| L7 | 33 | S | L6 AND (ETHANOL OR METHANOL OR PROPANOL) |
| L8 | 2442 | S | L1 AND FOAM |

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L9           54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L10          42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
L11          36 S L10 NOT L3
L12        2320 S FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIX
L13          43 S L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NI

=> d l13 11-20 ibib abs

L13  ANSWER 11 OF 43  USPATFULL on STN
ACCESSION NUMBER:       96:87650  USPATFULL
TITLE:                  Hydroxy-functional triamine catalyst compositions for
                        the production of polyurethanes
INVENTOR(S):            Klotz, Herbert C., Allentown, PA, United States
                        Lassila, Kevin R., Allentown, PA, United States
                        Listemann, Mark L., Whitehall, PA, United States
                        Minnich, Kristen E., Allentown, PA, United States
                        Savoca, Ann C. L., Bernville, PA, United States
PATENT ASSIGNEE(S):     Air Products and Chemicals, Inc., Allentown, PA, United
                        States (U.S. corporation)

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 5559161              19960924
APPLICATION INFO.:      US 1994-198925          19940218  (8)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           Granted
PRIMARY EXAMINER:       Seidleck, James J.
ASSISTANT EXAMINER:     Truong, Duc
LEGAL REPRESENTATIVE:   Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS:       22
EXEMPLARY CLAIM:        1
LINE COUNT:             598
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     A method for preparing a polyurethane foam which comprises reacting an
       organic polyisocyanate and a polyol in the presence of a blowing agent,
       a cell stabilizer and a catalyst composition consisting essentially of a
       compound of structure I ##STR1## wherein R is hydrogen, a C.sub.1
       -C.sub.4 alkyl, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl
       group; and

       n is 1 to 8

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13  ANSWER 12 OF 43  USPATFULL on STN
ACCESSION NUMBER:       96:36599  USPATFULL
TITLE:                  Hydroxy and amino functional pyrrolizidine catalyst
                        compositions for the production of polyurethanes
INVENTOR(S):            Carr, Richard V. C., Allentown, PA, United States
                        Lassila, Kevin R., Allentown, PA, United States
                        Listemann, Mark L., Whitehall, PA, United States
                        Mercando, Lisa A., Pennsburg, PA, United States
                        Minnich, Kristen E., Allentown, PA, United States
                        Savoca, Ann C. L., Bernville, PA, United States
                        Wressell, Amy L., Allentown, PA, United States
PATENT ASSIGNEE(S):     Air Products and Chemicals, Inc., Allentown, PA, United
                        States (U.S. corporation)
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| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5512603 | | 19960430 | |
| APPLICATION INFO.: | US 1994-199396 | | 19940222 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 500
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, and

R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 13 OF 43 USPATFULL on STN
ACCESSION NUMBER: 94:99905 USPATFULL
TITLE: Preparation of compact or cellular elastomers containing urethane and urea groups, and moldings produced therefrom
INVENTOR(S): Hinz, Werner, Frankenthal, Germany, Federal Republic of
Maletzko, Christian, Mannheim, Germany, Federal Republic of
Becker, Johannes, Ludwigshafen, Germany, Federal Republic of
Matzke, Guenter, Ketsch, Germany, Federal Republic of
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5364852 | | 19941115 | |
| APPLICATION INFO.: | US 1993-53759 | | 19930429 | (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1992-4218791 | 19920606 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Critharis, Mary
LEGAL REPRESENTATIVE: Golota, Mary E.
NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 1
LINE COUNT: 1043
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compact or cellular elastomers containing urethane and urea groups are prepared by reacting

a) at least one organic and/or modified organic polyisocyanate

b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,

c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of

d) catalysts and, if desired,

e) blowing agents,

f) auxiliaries and/or

g) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 14 OF 43 USPATFULL on STN
ACCESSION NUMBER: 93:69964 USPATFULL
TITLE: Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5239038 | | 19930824 |
| APPLICATION INFO.: | US 1989-442805 | | 19891129 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 600
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a polyisocyanate prepolymer prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 15 OF 43 USPATFULL on STN

ACCESSION NUMBER: 93:48632 USPATFULL
TITLE: Polyurea rim systems
INVENTOR(S): Slack, William E., Moundsville, WV, United States
Kratz, Mark R., Hannibal, OH, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5219973 | | 19930615 |
| APPLICATION INFO.: | US 1990-623469 | | 19901207 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a RIM process and an isocyanate reactive composition for use therein. The isocyanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 16 OF 43 USPATFULL on STN
ACCESSION NUMBER: 92:78648 USPATFULL
TITLE: Polyurea rim systems having improved flow properties and containing an organic cyclic carbonate
INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5149458 | | 19920922 |
| APPLICATION INFO.: | US 1991-686555 | | 19910417 (7) |

RELATED APPLN. INFO.: Division of Ser. No. US 1990-546078, filed on 29 Jun 1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned
DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Bleutge, John C.
ASSISTANT EXAMINER: Krass, Frederick
LEGAL REPRESENTATIVE: Gil, Joseph C.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 17 OF 43 USPATFULL on STN
ACCESSION NUMBER: 92:29727 USPATFULL
TITLE: Combustion-modified polyurethane foam
INVENTOR(S): Turner, Robert B., Lake Jackson, TX, United States
Priester, Jr., Ralph D., Lake Jackson, TX, United States
Burkes, Stephen R., Lake Jackson, TX, United States
PATENT ASSIGNEE(S): The Dow Chemical Company, Midland, MI, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5104910 | | 19920414 | |
| APPLICATION INFO.: | US 1991-637105 | | 19910103 | (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Galbraith, Ann K.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described herein is an isocyanate-reactive compound containing at least one linkage of the formula:

--X--X--

wherein X is independently in each occurrence --NR--, --S--, or --O--; R is independently in each occurrence hydrogen, C.sub.1-10 alkyl, aryl, or arylene; and at least one N, S, or O atom of the above formula is bonded to an aryl or arylene group. Also disclosed are isocyanate-reactive compositions containing the above compound and flexible polyurethane foams prepared therefrom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 18 OF 43 USPATFULL on STN
ACCESSION NUMBER: 92:23268 USPATFULL
TITLE: Isocyanate terminated prepolymers and the use thereof in a rim process
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5098984 | | 19920324 |
| APPLICATION INFO.: | US 1990-539100 | | 19900615 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 756
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a novel prepolymer and the use thereof in a RIM process. The prepolymer is an isocyanate terminated prepolymer having an isocyanate group content of from about 10 to about 26% by weight, and being prepared by a process comprising:

(a) reacting a C.sub.1 to C.sub.5 alkyl acetoacetate, with a polyol having a molecular weight of from about 500 to about 6000, and a hydroxyl functionality of from 2 to 4, and

(b) reacting the resultant product with an organic di- and/or polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 19 OF 43 USPATFULL on STN
ACCESSION NUMBER: 91:52576 USPATFULL
TITLE: Isocyanate reactive mixture and the use thereof in the manufacture of flexible polyurethane foams
INVENTOR(S): Milliren, Charles M., Coraopolis, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5028637 | | 19910702 |
| APPLICATION INFO.: | US 1989-417934 | | 19891006 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Whalen, Lyndanne M.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 495
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a reactive mixture for use in preparing a flexible polyurethane foam and to the foams produced therefrom. The reactive mixture broadly comprises an isocyanate reactive composition comprising:

A) from more than 0 up to 3 parts by weight per 100 parts by weight of components B) and C) of an amine of the formula:

H.sub.2 N--R--NH.sub.2

where R is a C.sub.3 to C.sub.10 straight or branched alkylene group or a C.sub.4 to C.sub.15 alicyclic group,

B) from more than 0 up to 40% by weight of a relatively high molecular weight compound containing at least two aromatically bound primary amine groups, and

C) from 60 to less than 100% by weight of one or more polyether polyhydroxyl compounds having hydroxyl functionalities of from 2 to 3 and molecular weights of from about 1000 to about 10,000, the percents by weight of component B) and component C) totalling 100%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 20 OF 43 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 91:52574 USPATFULL | | |
| TITLE: | Polyurea-cyclic carbonate RIM systems having improved flow properties | | |
| INVENTOR(S): | Nodelman, Neil H., Pittsburgh, PA, United States | | |
| PATENT ASSIGNEE(S): | Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 5028635 | | 19910702 |
| APPLICATION INFO.: | US 1990-546078 | | 19900629 (7) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Kight, III, John | | |
| ASSISTANT EXAMINER: | Krass, Frederick | | |
| LEGAL REPRESENTATIVE: | Gil, Joseph C. | | |
| NUMBER OF CLAIMS: | 3 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 633 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l13 21-31 ibib aba
'ABA' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):abs

L13 ANSWER 21 OF 43 USPATFULL on STN
AB The present invention is directed to a polyisocyanate comprising the reaction product of

(a) an isocyanate selected from the group consisting of methylenebis(phenylisocyanate), polymethylenepoly(phenylisocyanate), and mixtures thereof, and

(b) a polyester polyol having a hydroxyl functionality of from 2 to 3 and a molecular weight of from about 750 to about 3500, said polyester polyol prepared by reacting neopentyl glycol and adipic acid,

the isocyanate group content of said reaction product from about 14% to about 28% by weight. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 22 OF 43 USPATFULL on STN
AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are primary and/or secondary amino groups. The diamine has a molecular weight from 108 to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 23 OF 43 USPATFULL on STN
AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are pjrimary and/or secondary amino groups. The diamine has a molecular weight from 108 to

400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 24 OF 43 USPATFULL on STN
AB The present invention relates to a process for the production of polyurethane-urea or polyurea-based microcellular of foam moldings by reacting a polyisocyanate component containing aromatically bound isocyanate groups with an isocyanate-reactive component containing at least one compound which has at least three aliphatic ether groups and aliphatically bound isocyanate-reactive groups and wherein a portion of the aliphatically bound-reactive groups are amino groups which have been converted to ammonium carbamate, carbonate or bicarbonate groups.

The present invention also relates to the compounds containing aliphatic ether groups and ammonium carbamate, carbonate or bicarbonate groups, optionally in admixture with compounds containing unmodified amino groups or other known isocyanate-reactive compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 25 OF 43 USPATFULL on STN
AB The present invention is directed to a process for the production of optionally cellular, polyurethane and/or polyurethane-urea moldings having an impervious skin by reacting in a closed mold a reaction mixture containing

(a) at least one organic polyisocyanate,

(b) at least one compound which has a molecular weight of about 400 to 12,000 and at least two isocyanate-reactive groups, and

(c) optionally at least one compound which has a molecular weight of from 32 to 399 and at least two isocyanate-reactive groups,

wherein before the reaction takes place a surface-improving additive (e) is added containing

(e1) a liquid and sedimentation-stable polymer dispersion which is produced by the free radical addition polymerization or copolymerization of one or more olefinically unsaturated monomers in a high molecular weight compound having isocyanate-reactive groups of the type mentioned in (b),

and optionally

(e2) a metal salt of a monocarboxylic acid having at least 8 carbon atoms in the molecule

wherein additive (e) is used in a quantity such that about 0.01 to 3 parts by weight of polymer solids of the polymer dispersion (e1) and up to about 2 parts by weight of metal salt (e2) are incorporated per 100 parts of component (b).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 26 OF 43 USPATFULL on STN
AB Dialkyl diamines for use with polyols and polyisocyanates in cast elastomer and reaction injection molding polyurethane processes. The dialkyl diamines are prepared by nitration and reduction of dialkylbenzenes or alkylation of meta-phenylenediamine. The chain extenders have the following structure: ##STR1## where R.sub.1 is C.sub.1 -C.sub.6 alkyl or C.sub.3 -C.sub.6 cycloalkyl and R.sub.2 is C.sub.2 -C.sub.6 alkyl or C.sub.3 -C.sub.6 cycloalkyl.

Contrary to the teachings of the prior art the novel diamines have surprisingly good reaction times to form polyurethanes with excellent physical properties. Furthermore, little or no mold release is required in RIM and other processes using the chain extenders of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 27 OF 43 USPATFULL on STN
AB The present invention is directed to a process for the production of polyurea-based microcellular moldings comprising reacting

(a) at least one diisocyanate or polyisocyanate containing only aromatically bound isocyanate groups,

(b) at least one compound containing at least two isocyanate-reactive groups, and

(c) optionally the auxiliaries and additives known in polyurethane chemistry, in closed molds, components (a)-(c) being processed as a one-shot system by reaction injection molding, characterized in that component (b) comprises at least one polyether compound (b1) optionally in admixture with other isocyanate-reactive compounds and containing at least 3 aliphatically bonded ether groups and n-aliphatically bonded isocyanate-reactive groups, n standing for an integer or, statistically a fraction of from 2-4

(i) at least (100:n) % of the isocyanate-reactive groups present in component (b1) being aliphatically bonded primary and/or secondary amino groups,

(ii) at least 10 equivalent % of said amino groups being present in the form of ammonium carbamate groups having a functionality of two in the isocyanate addition reaction, of the type obtained by reacting aliphatically bonded, primary or secondary amino groups with carbon dioxide,

(iii) the unmodified compounds containing at least 3 ether groups having a molecular weight of from 200 to 10,000 and

(iv) at least 0,2 equivalent % of all isocyanate-reactive groups of the total component (b) being ammonium carbamate groups.

The present invention also relates to said compounds (b) optionally in admixture with the auxiliaries and additives known in polyurethane chemistry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 28 OF 43 USPATFULL on STN
AB A process for the production of optionally cellular molded articles with a smooth outer skin and improved surface characteristics by the reaction, inside a closed mold, of a mixture of one or more organic polyisocyanates, one or more compounds having molecular weights of from 400 to 12,000, which contain at least two isocyanate-reactive groups, chain-linking and/or chain-extending agents, and optionally, known auxiliary agents and additives used in polyurethane chemistry, characterized in that before the reaction, surface-improving additives comprising one or more polymers or copolymers of one or more olefinically-unsaturated monomers, which polymers or copolymers have molecular weights of from 200 to 50,000, are liquid at room temperature, soluble in the reaction mixture, and inert toward isocyanate groups and at least one metal salt of a monocarboxylic acid having at least 8 carbon atoms, are incorporated into the reaction mixture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 29 OF 43 USPATFULL on STN
AB The invention is directed to a process for the production of polyether polyols having an average molecular weight of from 200 to 10,000 and an average hydroxyl functionality of from 2.0 to 7.0, comprising reacting one or more alkylene oxides, optionally successively, with a mixture of polyhydric alcohols which has been produced by reduction of the condensation products from the condensation of formaldehyde hydrate. The invention is also directed to the process for the production of polyether polyols characterized in that the mixture of polyhydric alcohols is mixed with dihydric and/or trihydric alcohols and/or monoamines or polyamines prior to alkoxylation. Finally, the invention is directed to the use of the alkoxylated mixtures as the isocyanate-reactive component in the production of optionally cellular polyurethane plastics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 30 OF 43 USPATFULL on STN
AB A process for preparation of a urethane foam which comprises reacting an aromatic polyisocyanate with a polyol in the presence of a blowing agent and a catalytic amount of a compound of the formula

(CH.sub.3).sub.2 NCH.sub.2 CH.sub.2 (CH.sub.2).sub.n CH.sub.2 CH.sub.2 N(CH.sub.3).sub.2

wherein n is 4, 3, 2, 1, or 0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 31 OF 43 USPATFULL on STN
AB This invention relates to an improved process for the production of a mixture of low molecular weight polyhydric alcohols, hydroxy aldehydes and hydroxy ketones by condensing formaldehyde hydrate in the presence of calcium hydroxide as catalyst and in the presence of compounds capable of enediol formation as co-catalyst. A formaldehyde-containing enediol formation as co-catalyst. A formaldehyde containing solution of the co-catalyst in water and, optionally, low molecular weight monohydric or polyhydric alcohols and/or relatively high molecular weight polyhydroxyl compounds is adjusted to a pH value of from 9 to 12,

preferably from 9 to 10, by the addition of calcium hydroxide at a temperature of from 80° to 110° C., preferably from 90° to 105° C., so that condensation of the formaldehyde hydrate is initiated. An aqueous formalin solution and/or paraformaldehyde dispersion containing from 20 to 65%, by weight, of formaldehyde and calcium hydroxide are then introduced in such a quantity that the reaction mixture is maintained at a pH value of from 7.5 to 9.5, preferably from 8 to 9, at a temperature of from 80° to 110° C., preferably from 90° to 105° C. The concentration of formaldehyde is maintained at from 0.5 to 10%, by weight, preferably from 1.2 to 6%, by weight, based on the reaction mixture as a whole, throughout the condensation reaction. Finally, the residual quantity of formaldehyde, amounting to from 0.5 to 10%, by weight, is optionally removed by further condensation at pH values below 7 or by reaction with other compounds that are reactive with formaldehyde hydrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l13 32-43 ibib abs

L13 ANSWER 32 OF 43 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 79:26205 USPATFULL | | |
| TITLE: | Process for the production of low molecular weight polyhydroxyl compounds | | |
| INVENTOR(S): | Muller, Hanns P., Leverkusen, Germany, Federal Republic of<br>Wagner, Kuno, Leverkusen, Germany, Federal Republic of | | |
| PATENT ASSIGNEE(S): | Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 4156636 | | 19790529 |
| APPLICATION INFO.: | US 1978-934567 | | 19780817 (5) |
| | NUMBER | | DATE |
| PRIORITY INFORMATION: | DE 1977-2738512 | | 19770826 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Evans, Joseph E. | | |
| LEGAL REPRESENTATIVE: | Harsh, Gene, Gil, Joseph C. | | |
| NUMBER OF CLAIMS: | 11 | | |
| EXEMPLARY CLAIM: | 1,11 | | |
| LINE COUNT: | 898 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Low molecular weight polyhydroxyl compounds are made from formaldehyde hydrate by an improved process comprising adjusting the pH of an aqueous solution of formaldehyde and co-catalyst to 9-12 with calcium hydroxide at 80°-110° C. to begin condensation and then adding to this reaction mixture aqueous formalin and/or paraformaldehyde and calcium hydroxide to maintain a pH of 7.5-9.5 and temperature of 80°-110° C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 33 OF 43 USPATFULL on STN
ACCESSION NUMBER: 78:59947 USPATFULL
TITLE: Catalyst systems containing dimethylamino ether mono-ols for polyurethane foam formation
INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States
Duffy, Robert Donovan, Summersville, WV, United States
PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4122038 | | 19781024 |
| APPLICATION INFO.: | US 1977-819331 | | 19770727 (5) |

RELATED APPLN. INFO.: Division of Ser. No. US 1975-581745, filed on 29 May 1975, now patented, Pat. No. US 4049931
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Garvin, Patrick
LEGAL REPRESENTATIVE: Klosty, Marylin
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 2964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 34 OF 43 USPATFULL on STN
ACCESSION NUMBER: 77:51315 USPATFULL
TITLE: Catalyst systems containing dimethylamino ether mono-ols for polyurethane foam formation
INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States
Duffy, Robert Donovan, Summersville, WV, United States
PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4049931 | | 19770920 |

APPLICATION INFO.: US 1975-581745 19750529 (5)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Czaja, Donald E.
ASSISTANT EXAMINER: Fletcher, H. H.
LEGAL REPRESENTATIVE: Klosty, Marylin
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
LINE COUNT: 3171
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 35 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1974:65637 USPATOLD
TITLE: MONO AND TRIS(AMINO LOWERALKOXY) (ALKYL) POLYOXYALKYLENE COMPOUNDS AND METHOD OF PREPARATION
INVENTOR(S): POPPELSDORF F
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3799986 | A | 19740326 |
| APPLICATION INFO.: | US 1967-689004 | | 19671201 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1967-689004 | 19671208 |
| | US 1961-107060 | 19610502 |
| | US 1967-688971 | 19671208 |
| | US 1967-688976 | 19671208 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: HIGEL, FLOYD D
LINE COUNT: 1376

L13 ANSWER 36 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1972:61906 USPATOLD
TITLE: DIACID BRIDGED RING COMPOUNDS

INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3646132 | A | 19720229 |
| APPLICATION INFO.: | US 1969-846251 | | 19690701 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: WEINBERGER, LORRAINE A
ASSISTANT EXAMINER: GLEIMAN, E J
LINE COUNT: 1678
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 37 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1972:61815 USPATOLD
TITLE: SYM TRIS (4 PIPERIDYL) CYCLOHEXANES
INVENTOR(S): UELZMANN HEINZ
PATENT ASSIGNEE(S): GENCORP INC.

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3646041 | A | 19720229 |
| APPLICATION INFO.: | US 1970-7310 | | 19700101 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1970-7310 | 19700108 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: JILES, HENRY R
ASSISTANT EXAMINER: TODD, G T
LINE COUNT: 749
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 38 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1971:56250 USPATOLD
TITLE: BETA CYANOALKYL ETHERS OF POLYOXYALKYLENE ADDUCTS OF MODERATELY HIGH MOLECULAR WEIGHT
INVENTOR(S): POPPELSDORF FEDOR
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3560549 | A | 19710202 |
| APPLICATION INFO.: | US 1967-688976 | | 19671201 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1961-107060 | 19610502 |
| | US 1967-688971 | 19671208 |
| | US 1967-688976 | 19671208 |
| | US 1967-689004 | 19671208 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: BRUST, JOSEPH P
LINE COUNT: 1584

L13 ANSWER 39 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1970:41512 USPATOLD
TITLE: METHOD FOR MAKING SYM TRIS(4 PYRIDYL) CYCLOHEXANES AND ALKYL SUBSTITUTED SYM TRIS (4 PYRIDYL) CYCLOHEXANES
INVENTOR(S): UELZMANN HEINZ
PATENT ASSIGNEE(S): GENCORP INC.

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3528988 | A | 19700915 |
| APPLICATION INFO.: | US 1967-674760 | | 19671001 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1967-674760 | 19671012 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: RANDOLPH, JOHN D
LINE COUNT: 768
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 40 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1970:4861 USPATOLD
TITLE: NORBORNANE DIISOCYANATES
INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3492330 | A | 19700127 |
| APPLICATION INFO.: | US 1966-520298 | | 19660101 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: PARKER, CHARLES B
LINE COUNT: 1827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 41 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1966:29487 USPATOLD
TITLE: Products resulting from the reaction of carbonate diisocyanates with active hydrogencompounds
INVENTOR(S): BROTHERTON THOMAS K
LYNN JOHN W

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3256220 | A | 19660614 |
| APPLICATION INFO.: | US 1964-413927 | | 19641125 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1964-413927 | 19641125 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: BERCOVITZ
LINE COUNT: 2777
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 42 OF 43 USPATOLD on STN
ACCESSION NUMBER: 1966:29480 USPATOLD
TITLE: Preparation of cellular isocyanatepolyamino compound reaction products
INVENTOR(S): MAXEY EDWIN M
GMITTER GEORGE T

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3256213 | A | 19660614 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1962-198765 | 19620531 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: BERCOVITZ, LEON L
LINE COUNT: 710
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 43 OF 43 USPAT2 on STN
ACCESSION NUMBER: 2003:325213 USPAT2
TITLE: High performance RIM elastomers and a process for their production
INVENTOR(S): Super, Michael S., Oakdale, PA, United States
Steppan, David D., Gibsonia, PA, United States
Slack, William E., Moundsville, WV, United States
Potts, Bruce H., Beaver, PA, United States
Hurley, Michael F., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|

| | | | |
|---|---|---|---|
| PATENT INFORMATION: | US 6765080 | B2 | 20040720 |
| APPLICATION INFO.: | US 2002-165297 | | 20020606 (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 1256
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008

L1 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4 57 S L1 (L) (RANEY (2W) NICKEL)
L5 49 S L4 NOT L3
L6 45 S L5 AND RATIO
L7 33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
L8 2442 S L1 AND FOAM
L9 54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L10 42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
L11 36 S L10 NOT L3
L12 2320 S FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIX
L13 43 S L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NI

=> s l12 and (raney (2w) nickel)
L14 56 L12 AND (RANEY (2W) NICKEL)

=> s l14 and hydrogenation
L15 49 L14 AND HYDROGENATION

=> d l15 1-11 ibib abs

L15 ANSWER 1 OF 49 IFIPAT COPYRIGHT 2008 IFI on STN

AN 11244745 IFIPAT;IFIUDB;IFICDB

TITLE: ALDEHYDE AND ALCOHOL COMPOSITIONS DERIVED FROM SEED OILS

INVENTOR(S): Babb; David A., Lake Jackson, TX, US
Bunning; Donald L., South Charleston, WV, US
Derstine; Christopher W., Winfield, WV, US
Gilchrist; James H., Dunbar, WV, US
Jouett; H. Ray, Houston, TX, US
Kanel; Jeffrey S., Hurricane, WV, US
Lysenko; Zenon, Midland, MI, US
Morrison; Donald L., Fort Collins, CO, US
Olson; Kurt D., Cross Lanes, WV, US
Peng; Wei-Jun, Hurricane, WV, US
Philips; Joe D., Lake Jacksosn, TX, US
Roesch; Brian M., Cross Lanes, WV, US
Sanders; Aaron W., Missouri City, TX, US
Schrock; Alan K., Lake Jackson, TX, US
Thomas; Pulikkottil J., Midland, MI, US

PATENT ASSIGNEE(S): Unassigned

PATENT ASSIGNEE PROBABLE: Dow Chemical Co The (Probable)

AGENT: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US

| | NUMBER | PK | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2006193802 | A1 | 20060831 | |
| APPLICATION INFORMATION: | US 2004-551854 | | 20040422 | |
| | WO 2004-US12246 | | 20040422 | |
| | | | 20050930 | PCT 371 date |
| | | | 20050930 | PCT 102(e) date |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY APPLN. INFO.: | US 2003-465663P | 20030425 (Provisional) |
| FAMILY INFORMATION: | US 2006193802 | 20060831 |

DOCUMENT TYPE: Utility
Patent Application - First Publication

FILE SEGMENT: CHEMICAL
APPLICATION

ENTRY DATE: Entered STN: 1 Sep 2006
Last Updated on STN: 1 Sep 2006

PARENT CASE DATA:

This application claims the benefit of U.S. Provisional Patent Application Ser. No. 60/465,663, filed Apr. 25, 2003.

NUMBER OF CLAIMS: 34

AB An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formylsubstituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of

greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol (mono(hydroxymethyl)), greater than about 1 to less than about 65 percent diol (di(hydroxymethyl)), greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.
CLMN 34

L15 ANSWER 2 OF 49 USPATFULL on STN
ACCESSION NUMBER: 2007:201150 USPATFULL
TITLE: Bioplastics, monomers thereof, and processes for the preparation thereof from agricultural feedstocks
INVENTOR(S): Narine, Suresh, Alberta, CANADA
Sporns, Peter, Alberta, CANADA
Yue, Jin, Alberta, CANADA

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20070175793 | A1 | 20070802 | |
| APPLICATION INFO.: | US 2007-649620 | A1 | 20070104 | (11) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2006-755770P | 20060104 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 87 Drawing Page(s)
LINE COUNT: 3864
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 49 USPATFULL on STN
ACCESSION NUMBER: 2007:89677 USPATFULL
TITLE: Super soft elastomers as skinning material for

composites
INVENTOR(S): Ulbrich, Dagmar, Koln, GERMANY, FEDERAL REPUBLIC OF
Guether, Ralf, McDonald, PA, UNITED STATES
Bohne, Franz-Josef, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Schutze, Marc, Dortmund, GERMANY, FEDERAL REPUBLIC OF
Rosthauser, James W., Pittsburgh, PA, UNITED STATES
Perry, John H., Scenery Hill, PA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20070078253 | A1 | 20070405 | |
| APPLICATION INFO.: | US 2005-241208 | A1 | 20050930 | (11) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BAYER MATERIAL SCIENCE LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205, US
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 1148
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to soft sprayable polyurethane elastomers which exhibit low hardness without the addition of plasticizers. Other aspects of this invention are composites with a soft touch surface and processes of making these composites. These composites may also be decorative and/or pigmented composites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 4 OF 49 USPATFULL on STN
ACCESSION NUMBER: 2006:227438 USPATFULL
TITLE: Aldehyde and alcohol compositions derived from seed oils
INVENTOR(S): Lysenko, Zenon, Midland, MI, UNITED STATES
Morrison, Donald L., Fort Collins, CO, UNITED STATES
Babb, David A., Lake Jackson, TX, UNITED STATES
Bunning, Donald L., South Charleston, WV, UNITED STATES
Derstine, Christopher W., Winfield, WV, UNITED STATES
Gilchrist, James H., Dunbar, WV, UNITED STATES
Jouett, H. Ray, Houston, TX, UNITED STATES
Kanel, Jeffrey S., Hurricane, WV, UNITED STATES
Olson, Kurt D., Cross Lanes, WV, UNITED STATES
Peng, Wei-Jun, Hurricane, WV, UNITED STATES
Philips, Joe D., Lake Jacksosn, TX, UNITED STATES
Roesch, Brian M., Cross Lanes, WV, UNITED STATES
Sanders, Aaron W., Missouri City, TX, UNITED STATES
Schrock, Alan K., Lake Jackson, TX, UNITED STATES
Thomas, Pulikkottil J., Midland, MI, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20060193802 | A1 | 20060831 | |
| APPLICATION INFO.: | US 2004-551854 | A1 | 20040422 | (10) |
| | WO 2004-US12246 | | 20040422 | |
| | | | 20050930 | PCT 371 date |

| | NUMBER | DATE |
|---|---|---|

| | | |
|---|---|---|
| PRIORITY INFORMATION: | US 2003-465663P | 20030425 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US | |
| NUMBER OF CLAIMS: | 34 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 1 Drawing Page(s) | |
| LINE COUNT: | 1284 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol {mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 49 USPATFULL on STN

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2005:264715 USPATFULL | | | |
| TITLE: | Activatable material and method of forming and using same | | | |
| INVENTOR(S): | Kassa, Abraham, Shelby Township, MI, UNITED STATES<br>Harthcock, Matthew, Oakland Township, MI, UNITED STATES<br>Sendijarevic, Aisa, Troy, MI, UNITED STATES<br>Sendijarevic, Vahid, Troy, MI, UNITED STATES | | | |
| PATENT ASSIGNEE(S): | L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. corporation) | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 20050230027 | A1 | 20051020 | |
| APPLICATION INFO.: | US 2005-89712 | A1 | 20050325 | (11) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2004-622442P | | 20041027 (60) | |
| | US 2004-562663P | | 20040415 (60) | |
| DOCUMENT TYPE: | Utility | | | |

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210, PONTIAC, MI, 48342, US
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 1354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 49 USPATFULL on STN
ACCESSION NUMBER: 2003:325213 USPATFULL
TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR PRODUCTION
INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES
Steppan, David D., Gibsonia, PA, UNITED STATES
Slack, William E., Moundsville, WV, UNITED STATES
Potts, Bruce H., Beaver, PA, UNITED STATES
Hurley, Michael F., Pittsburgh, PA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 20030229195 | A1 | 20031211 | |
| | US 6765080 | B2 | 20040720 | |
| APPLICATION INFO.: | US 2002-165297 | A1 | 20020606 | (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1305
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2002:109128 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX, United States 77079

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6388010 | B1 | 20020514 |
| APPLICATION INFO.: | US 2000-491017 | | 20000125 (9) |

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May 1998, now patented, Pat. No. US 6060560

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 8 OF 49 USPATFULL on STN
ACCESSION NUMBER: 2000:57854 USPATFULL
TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers
INVENTOR(S): St. Clair, David John, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6060560 | | 20000509 |
| APPLICATION INFO.: | US 1998-73666 | | 19980506 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47551P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Buttner, David
LEGAL REPRESENTATIVE: Haas, Donald F.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2129
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1999:132898 USPATFULL
TITLE: Resilient polyurethane foams of polydiene diols and oil
INVENTOR(S): St. Clair, David John, Houston, TX, United States
Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5973016 | | 19991026 | |
| APPLICATION INFO.: | US 1998-81558 | | 19980519 | (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47521P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Gorr, Rachel
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is provided a high resilience polyurethane foam produced from a

polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aromatic polyisocyanate, and oil. The polydiene diol foams have excellent processability, producing high resilience foams having small cell size and uniform cell size distributions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 10 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1999:78786 USPATFULL
TITLE: Weatherable resilient polyurethane foams
INVENTOR(S): St. Clair, David John, Houston, TX, United States
Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5922781 | | 19990713 |
| APPLICATION INFO.: | US 1998-81559 | | 19980519 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47520P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Foelak, Morton
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a weatherable polyurethane foam produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aliphatic or cycloaliphatic polyisocyanate, and a stabilizer. The polydiene diol foams have excellent stability under sunlight exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 11 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1999:24702 USPATFULL
TITLE: Flexible foams and flexible molded foams based on allophanate-modified diphenylmethane diisocyanates and processes for the production of these foams
INVENTOR(S): Milliren, Charles M., Coraopolis, PA, United States
Madan, Sanjeev, Coraopolis, PA, United States
Slack, William E., Moundsville, WV, United States
Zibert, Ronald, Burgettstown, PA, United States
Riccitelli, Richard A., Monaca, PA, United States
Miller, William E., St. Clairsville, OH, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5874485 | | 19990223 |

APPLICATION INFO.: US 1997-966818 19971110 (8)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Gorr, Rachel
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1332
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to flexible foams and flexible molded foams prepared from an isocyanate component comprising an allophanate-modified diphenylmethane diisocyanate. The present invention also relates to processes for the production of these flexible foams and flexible molded foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L15 ANSWER 12 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1998:157407 USPATFULL
TITLE: Resilient polyurethane foams of polydiene diols and tackifying resin
INVENTOR(S): St. Clair, David John, Houston, TX, United States
Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5849806 | | 19981215 |
| APPLICATION INFO.: | US 1998-80997 | | 19980519 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1997-47522P | 19970523 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Foelak, Morton
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
LINE COUNT: 533
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a high resilience polyurethane foam adhesive produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aromatic polyisocyanate, a tackifying resin and oil. In another embodiment, there is provided a polyurethane foam adhesive produced from a blend of a polydiene diol and a polydiene mono-ol, an aromatic polyisocyanate, and

a tackifying resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 13 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1998:72697 USPATFULL
TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom
INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States
Meltzer, A. Donald, Brecksville, OH, United States
Suddaby, Brian R., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5770674 | | 19980623 |
| APPLICATION INFO.: | US 1996-744037 | | 19961105 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed on 7 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 14 OF 49 USPATFULL on STN
ACCESSION NUMBER: 1998:7110 USPATFULL
TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5710192 | | 19980120 |
| APPLICATION INFO.: | US 1996-724940 | | 19961002 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Steinberg, Beverlee G.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 15 OF 49 USPATFULL on STN
ACCESSION NUMBER: 96:116459 USPATFULL
TITLE: Polyisocyanate based upon 4,4'-and 2,4'-diphenyl-methane dllsocyanates and use thereof in a rim process
INVENTOR(S): Hurley, Michael F., Oakdale, PA, United States
Eiben, Robert G., Bridgeville, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5585452 | | 19961217 |
| APPLICATION INFO.: | US 1995-469963 | | 19950606 (8) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-144458, filed on 28 Oct 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 949
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel polyisocyanate which is liquid and room temperature stable and has an isocyanate group content of from 10 to 30% by weight is prepared by reacting:

a) an isocyanate mixture of 4,4'-diphenylmethane diisocyanate, 2,4'-diphenylmethane diisocyanate, and an amount of an isocyanate based upon diphenylmethane diisocyanate having an isocyanate functionality of more than 2, such that the total isocyanate mixture a) has an average isocyanate functionality of from 2.02 to 2.50, and

b) one or more polyols selected from the group consisting of

1) diols having molecular weights of from 1000 to 5000,

2) triols having molecular weights of from 1000 to 6000, and

3) mixtures thereof.

When used in a RIM process, parts are produced which have excellent low temperature impact properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 16 OF 49 USPATFULL on STN
ACCESSION NUMBER: 96:92149 USPATFULL
TITLE: Rim process utilizing isocyanates based upon 2,4'- and 4,4'-diphenylmethane diisocyanate
INVENTOR(S): Hurley, Michael F., Oakdale, PA, United States
Eiben, Robert G., Bridgeville, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5563232 | | 19961008 |
| APPLICATION INFO.: | US 1995-385017 | | 19950207 (8) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-144916, filed on 28 Oct 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 725
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A RIM process utilizing a reaction product of an MDI containing from 6 to 50% by weight of the 2,4'-isomer and a polypropylene glycol as the isocyanate reactant results in a molded product having excellent low temperature impact properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 17 OF 49 USPATFULL on STN
ACCESSION NUMBER: 96:36599 USPATFULL
TITLE: Hydroxy and amino functional pyrrolizidine catalyst compositions for the production of polyurethanes
INVENTOR(S): Carr, Richard V. C., Allentown, PA, United States
Lassila, Kevin R., Allentown, PA, United States
Listemann, Mark L., Whitehall, PA, United States
Mercando, Lisa A., Pennsburg, PA, United States
Minnich, Kristen E., Allentown, PA, United States
Savoca, Ann C. L., Bernville, PA, United States
Wressell, Amy L., Allentown, PA, United States
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United

States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5512603 | | 19960430 |
| APPLICATION INFO.: | US 1994-199396 | | 19940222 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 500
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, and

R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 18 OF 49 USPATFULL on STN
ACCESSION NUMBER: 94:99905 USPATFULL
TITLE: Preparation of compact or cellular elastomers containing urethane and urea groups, and moldings produced therefrom
INVENTOR(S): Hinz, Werner, Frankenthal, Germany, Federal Republic of
Maletzko, Christian, Mannheim, Germany, Federal Republic of
Becker, Johannes, Ludwigshafen, Germany, Federal Republic of
Matzke, Guenter, Ketsch, Germany, Federal Republic of
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5364852 | | 19941115 |
| APPLICATION INFO.: | US 1993-53759 | | 19930429 (8) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1992-4218791 | 19920606 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Critharis, Mary
LEGAL REPRESENTATIVE: Golota, Mary E.

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 1043
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compact or cellular elastomers containing urethane and urea groups are prepared by reacting

a) at least one organic and/or modified organic polyisocyanate

b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,

c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of

d) catalysts and, if desired,

e) blowing agents,

f) auxiliaries and/or

g) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 19 OF 49 USPATFULL on STN
ACCESSION NUMBER: 94:84285 USPATFULL
TITLE: Polyisocyanate based upon 4,4'- and 2,4'-diphenylmethane diisocyanates and use thereof in a rim process
INVENTOR(S): Steppan, David D., Gibsonia, PA, United States
Slack, William E., Moundsville, WV, United States
Beckley, Charles G., Moundsville, WV, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5350778 | | 19940927 | |
| APPLICATION INFO.: | US 1993-144269 | | 19931028 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel liquid, room temperature polyisocyanate having isocyanate group contents of from 6 to 31% by weight, are prepared by reacting:

a) a methylene-bis(phenyl isocyanate) containing

1) from 65 to 90% by weight of the 4,4'-isomer,

2) from 10 to 35% by weigh of the 2,4'-isomer, and

3) no more than 2% by weight of the 2,2'-isomer, with the percents of components a)1), a)2), and a)3) totalling 100%, and

b) a mixture of:

1) one or more organic compounds having molecular weights of from 400 to 6000 and containing from 2 to 8 isocyanate reactive groups, and

2) one or more organic diols having molecular weights of from 60 to 200, excluding tripropylene glycol, the weight ratio of component b)1) to b)2) being from 150:1 to 5:1.

When used in a RIM process, molded products are obtained which have improved tear strength, improved flexural modulus, improved impact resistance, and improved tensile strength.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 20 OF 49 USPATFULL on STN
ACCESSION NUMBER: 93:69964 USPATFULL
TITLE: Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5239038 | | 19930824 |
| APPLICATION INFO.: | US 1989-442805 | | 19891129 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 600
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a polyisocyanate prepolymer prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 21 OF 49 USPATFULL on STN
ACCESSION NUMBER: 93:48632 USPATFULL
TITLE: Polyurea rim systems
INVENTOR(S): Slack, William E., Moundsville, WV, United States
Kratz, Mark R., Hannibal, OH, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5219973 | | 19930615 |
| APPLICATION INFO.: | US 1990-623469 | | 19901207 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a RIM process and an isocyanate reactive composition for use therein. The isocyanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L15 ANSWER 22 OF 49 USPATFULL on STN
ACCESSION NUMBER: 92:78648 USPATFULL
TITLE: Polyurea rim systems having improved flow properties and containing an organic cyclic carbonate
INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5149458 | | 19920922 |
| APPLICATION INFO.: | US 1991-686555 | | 19910417 (7) |

RELATED APPLN. INFO.: Division of Ser. No. US 1990-546078, filed on 29 Jun 1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Bleutge, John C.
ASSISTANT EXAMINER: Krass, Frederick

LEGAL REPRESENTATIVE: Gil, Joseph C.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 23 OF 49 USPATFULL on STN
ACCESSION NUMBER: 92:29727 USPATFULL
TITLE: Combustion-modified polyurethane foam
INVENTOR(S): Turner, Robert B., Lake Jackson, TX, United States
Priester, Jr., Ralph D., Lake Jackson, TX, United States
Burkes, Stephen R., Lake Jackson, TX, United States
PATENT ASSIGNEE(S): The Dow Chemical Company, Midland, MI, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5104910 | | 19920414 | |
| APPLICATION INFO.: | US 1991-637105 | | 19910103 | (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Galbraith, Ann K.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described herein is an isocyanate-reactive compound containing at least one linkage of the formula:

--X--X--

wherein X is independently in each occurrence --NR--, --S--, or --O--; R is independently in each occurrence hydrogen, C.sub.1-10 alkyl, aryl, or arylene; and at least one N, S, or O atom of the above formula is bonded to an aryl or arylene group. Also disclosed are isocyanate-reactive compositions containing the above compound and flexible polyurethane foams prepared therefrom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 24 OF 49 USPATFULL on STN
ACCESSION NUMBER: 92:23268 USPATFULL

TITLE: Isocyanate terminated prepolymers and the use thereof in a rim process
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5098984 | | 19920324 |
| APPLICATION INFO.: | US 1990-539100 | | 19900615 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Cooney, Jr., John M.
LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 756
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a novel prepolymer and the use thereof in a RIM process. The prepolymer is an isocyanate terminated prepolymer having an isocyanate group content of from about 10 to about 26% by weight, and being prepared by a process comprising:

(a) reacting a C.sub.1 to C.sub.5 alkyl acetoacetate, with a polyol having a molecular weight of from about 500 to about 6000, and a hydroxyl functionality of from 2 to 4, and

(b) reacting the resultant product with an organic di- and/or polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 25 OF 49 USPATFULL on STN
ACCESSION NUMBER: 91:52574 USPATFULL
TITLE: Polyurea-cyclic carbonate RIM systems having improved flow properties
INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 5028635 | | 19910702 |
| APPLICATION INFO.: | US 1990-546078 | | 19900629 (7) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Krass, Frederick
LEGAL REPRESENTATIVE: Gil, Joseph C.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1

LINE COUNT: 633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 26 OF 49 USPATFULL on STN
ACCESSION NUMBER: 89:87579 USPATFULL
TITLE: Isocyanate reactive mixture and the use thereof in the manufacture of flexible polyurethane foams
INVENTOR(S): Milliren, Charles M., Coraopolis, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 4876292 | | 19891024 | |
| APPLICATION INFO.: | US 1988-254326 | | 19881006 | (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
ASSISTANT EXAMINER: Henderson, L.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 523
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a reactive mixture for use in preparing a flexible polyurethane foam and to the foams produced therefrom. The reactive mixture broadly comprises

(A) from more than 0 up to 3 parts by weight per 100 parts by weight of components (B) and (C) of an amine of the formula:

H.sub.2 N--R--NH.sub.2

where R is a C.sub.4 to C.sub.10 straight or branched alkylene group, or a C.sub.4 to C.sub.15 alicyclic group,

(B) from 0 to 30% by weight of a polyoxyalkylene polyamine having a molecular weight of from about 400 to about 5000 and containing from 2 to 3 primary amino groups, and

(C) from 700 to 100% by weight of one or more polyether polyhydroxyl compounds having hydroxyl functionalities from about 2 to 3 and molecular weights of from about 1000 to about 10,000, the percents of components (B) and (C) totalling 100%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 27 OF 49 USPATFULL on STN
ACCESSION NUMBER: 89:67507 USPATFULL
TITLE: Novel neopentyladipate based prepolymers and reaction injection molded products made therefrom
INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
Nodelman, Neil H., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4857561 | | 19890815 |
| APPLICATION INFO.: | US 1988-238436 | | 19880830 (7) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 666
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a polyisocyanate comprising the reaction product of

(a) an isocyanate selected from the group consisting of methylenebis(phenylisocyanate), polymethylenepoly(phenylisocyanate), and mixtures thereof, and

(b) a polyester polyol having a hydroxyl functionality of from 2 to 3 and a molecular weight of from about 750 to about 3500, said polyester polyol prepared by reacting neopentyl glycol and adipic acid,

the isocyanate group content of said reaction product from about 14% to about 28% by weight. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 28 OF 49 USPATFULL on STN
ACCESSION NUMBER: 88:65673 USPATFULL
TITLE: Process for the production of molded articles, mixtures of isocyanate reactive compounds suitable therefor and the molded articles obtained by the process
INVENTOR(S): Weber, Christian, Leverkusen, Germany, Federal Republic of
Schafer, Hermann, Leverkusen, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellshaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4777187 | | 19881011 |
| APPLICATION INFO.: | US 1988-149771 | | 19880129 (7) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1987-3703739 | 19870207 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Roy, Thomas W.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 914
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a process for the production of polyurethane or polyurea elastomeric molded articles according to the reaction injection molding process by reacting a polyisocyanate, a high molecular weight isocyanate reactive component and optionally a diamine chain extender, wherein the improvement is based on the use of the reaction product of a polyepoxide containing at least two epoxide groups with at least one mol of an aromatic diamine per epoxide group wherein the polyepoxide is present in an amount sufficient to provide about 0.5 to 25% by weight of the polyepoxide based on the weight of all the isocyanate reactive components. The present invention is also directed to the isocyanate reactive components for use in this process and to the molded articles produced in accordance with this process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 29 OF 49 USPATFULL on STN
ACCESSION NUMBER: 88:62518 USPATFULL
TITLE: Process for the production of elastic molded articles
INVENTOR(S): Weber, Christian, Leverkusen, Germany, Federal Republic of
Wirtz, Hans, Leverkusen, Germany, Federal Republic of
Seel, Klaus, Cologne, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4774264 | | 19880927 |
| APPLICATION INFO.: | US 1986-853520 | | 19860418 (6) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1982-443414, filed on 22 Nov 1982 | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1981-3147736 | 19811202 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Whalen, Lyndanne M.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 703
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These

polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are primary and/or secondary amino groups. The diamine has a molecular weight from 108 to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 30 OF 49 USPATFULL on STN
ACCESSION NUMBER: 88:62517 USPATFULL
TITLE: Process for the production of elastic molded articles
INVENTOR(S): Weber, Christian, Leverkusen, Germany, Federal Republic of
Wirtz, Hans, Leverkusen, Germany, Federal Republic of
Seel, Klaus, Cologne, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4774263 | | 19880927 |
| APPLICATION INFO.: | US 1982-443414 | | 19821122 (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1981-3147736 | 19811202 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Whalen, Lyndanne M.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are pjrimary and/or secondary amino groups. The diamine has a molecular weight from 108 to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 31 OF 49 USPATFULL on STN
ACCESSION NUMBER: 87:13182 USPATFULL
TITLE: Process for the production of microcellular or foamed moldings and compounds containing isocyanate-reactive groups suitable for carrying out this process
INVENTOR(S): Rasshofer, Werner, Cologne, Germany, Federal Republic of

| | |
|---|---|
| | Meiners, Hans-Joachim, Leverkusen, Germany, Federal Republic of<br>Seel, Klaus, Cologne, Germany, Federal Republic of<br>Wussow, Hans-Georg, Duesseldorf, Germany, Federal Republic of |
| PATENT ASSIGNEE(S): | Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 4645630 | | 19870224 | |
| APPLICATION INFO.: | US 1984-645734 | | 19840830 | (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1983-3333464 | 19830916 |

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|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | Granted |
| PRIMARY EXAMINER: | Anderson, Philip |
| LEGAL REPRESENTATIVE: | Harsh, Gene, Gil, Joseph C., Roy, Thomas W. |
| NUMBER OF CLAIMS: | 9 |
| EXEMPLARY CLAIM: | 1 |
| LINE COUNT: | 1141 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for the production of polyurethane-urea or polyurea-based microcellular of foam moldings by reacting a polyisocyanate component containing aromatically bound isocyanate groups with an isocyanate-reactive component containing at least one compound which has at least three aliphatic ether groups and aliphatically bound isocyanate-reactive groups and wherein a portion of the aliphatically bound-reactive groups are amino groups which have been converted to ammonium carbamate, carbonate or bicarbonate groups.

The present invention also relates to the compounds containing aliphatic ether groups and ammonium carbamate, carbonate or bicarbonate groups, optionally in admixture with compounds containing unmodified amino groups or other known isocyanate-reactive compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 32 OF 49 USPATFULL on STN

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|---|---|
| ACCESSION NUMBER: | 85:8920 USPATFULL |
| TITLE: | Process for the production of microcellular moldings from diisocyanate and compounds containing groups obtained by reacting amino groups with carbon dioxide |
| INVENTOR(S): | Schafer, Walter, Cologne, Germany, Federal Republic of<br>Meiners, Hans-Joachim, Leverkusen, Germany, Federal Republic of<br>Seel, Klaus, Cologne, Germany, Federal Republic of<br>Reichmann, Wolfgang, Hilden, Germany, Federal Republic of<br>Wagner, Kuno, Leverkusen, Germany, Federal Republic of<br>Findeisen, Kurt, Odenthal, Germany, Federal Republic of |
| PATENT ASSIGNEE(S): | Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|

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| PATENT INFORMATION: | US 4499038 | 19850212 |
| APPLICATION INFO.: | US 1983-549040 | 19831107 (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1982-3242925 | 19821120 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a process for the production of polyurea-based microcellular moldings comprising reacting

(a) at least one diisocyanate or polyisocyanate containing only aromatically bound isocyanate groups,

(b) at least one compound containing at least two isocyanate-reactive groups, and

(c) optionally the auxiliaries and additives known in polyurethane chemistry, in closed molds, components (a)-(c) being processed as a one-shot system by reaction injection molding, characterized in that component (b) comprises at least one polyether compound (b1) optionally in admixture with other isocyanate-reactive compounds and containing at least 3 aliphatically bonded ether groups and n-aliphatically bonded isocyanate-reactive groups, n standing for an integer or, statistically a fraction of from 2-4

(i) at least (100:n) % of the isocyanate-reactive groups present in component (b1) being aliphatically bonded primary and/or secondary amino groups,

(ii) at least 10 equivalent % of said amino groups being present in the form of ammonium carbamate groups having a functionality of two in the isocyanate addition reaction, of the type obtained by reacting aliphatically bonded, primary or secondary amino groups with carbon dioxide,

(iii) the unmodified compounds containing at least 3 ether groups having a molecular weight of from 200 to 10,000 and

(iv) at least 0,2 equivalent % of all isocyanate-reactive groups of the total component (b) being ammonium carbamate groups.

The present invention also relates to said compounds (b) optionally in admixture with the auxiliaries and additives known in polyurethane chemistry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l15 33-49 ibib abs

L15 ANSWER 33 OF 49 USPATFULL on STN
ACCESSION NUMBER: 84:20236 USPATFULL
TITLE: Process for the production of molded articles
INVENTOR(S): Rasshofer, Werner, Cologne, Germany, Federal Republic of
Schafer, Hermann, Leverkusen, Germany, Federal Republic of
Paul, Reiner, Muelheim-Ruhr, Germany, Federal Republic of
Beuth, Josef, Frechen, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4442236 | | 19840410 |
| APPLICATION INFO.: | US 1983-522276 | | 19830811 (6) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1982-3231399 | 19820824 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 607
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for the production of optionally cellular molded articles with a smooth outer skin and improved surface characteristics by the reaction, inside a closed mold, of a mixture of one or more organic polyisocyanates, one or more compounds having molecular weights of from 400 to 12,000, which contain at least two isocyanate-reactive groups, chain-linking and/or chain-extending agents, and optionally, known auxiliary agents and additives used in polyurethane chemistry, characterized in that before the reaction, surface-improving additives comprising one or more polymers or copolymers of one or more olefinically-unsaturated monomers, which polymers or copolymers have molecular weights of from 200 to 50,000, are liquid at room temperature, soluble in the reaction mixture, and inert toward isocyanate groups and at least one metal salt of a monocarboxylic acid having at least 8 carbon atoms, are incorporated into the reaction mixture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 34 OF 49 USPATFULL on STN
ACCESSION NUMBER: 81:5293 USPATFULL
TITLE: Alkoxylated formose polyols and their use in polyurethane plastics
INVENTOR(S): Wagner, Kuno, Leverkusen, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|

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| PATENT INFORMATION: | US 4247654 | 19810127 |
| APPLICATION INFO.: | US 1979-15082 | 19790226 (6) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1977-829170, filed on 30 Aug 1977, now abandoned | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1976-2639083 | 19760831 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 2116
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to a process for the production of polyether polyols having an average molecular weight of from 200 to 10,000 and an average hydroxyl functionality of from 2.0 to 7.0, comprising reacting one or more alkylene oxides, optionally successively, with a mixture of polyhydric alcohols which has been produced by reduction of the condensation products from the condensation of formaldehyde hydrate. The invention is also directed to the process for the production of polyether polyols characterized in that the mixture of polyhydric alcohols is mixed with dihydric and/or trihydric alcohols and/or monoamines or polyamines prior to alkoxylation. Finally, the invention is directed to the use of the alkoxylated mixtures as the isocyanate-reactive component in the production of optionally cellular polyurethane plastics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 35 OF 49 USPATFULL on STN
ACCESSION NUMBER: 80:25784 USPATFULL
TITLE: Polyurethane foams and elastomers prepared from low molecular weight polyhydroxyl compounds
INVENTOR(S): Muller, Hanns P., Leverkusen, Germany, Federal Republic of
Wagner, Kuno, Leverkusen, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4205138 | | 19800527 |
| APPLICATION INFO.: | US 1979-38033 | | 19790510 (6) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1978-934567, filed on 17 Aug 1978, now patented, Pat. No. US 4156636 | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | DE 1977-2738512 | 19770826 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
LINE COUNT: 890
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to an improved process for the production of a mixture of low molecular weight polyhydric alcohols, hydroxy aldehydes and hydroxy ketones by condensing formaldehyde hydrate in the presence of calcium hydroxide as catalyst and in the presence of compounds capable of enediol formation as co-catalyst. A formaldehyde-containing enediol formation as co-catalyst. A formaldehyde containing solution of the co-catalyst in water and, optionally, low molecular weight monohydric or polyhydric alcohols and/or relatively high molecular weight polyhydroxyl compounds is adjusted to a pH value of from 9 to 12, preferably from 9 to 10, by the addition of calcium hydroxide at a temperature of from 80° to 110° C., preferably from 90° to 105° C., so that condensation of the formaldehyde hydrate is initiated. An aqueous formalin solution and/or paraformaldehyde dispersion containing from 20 to 65%, by weight, of formaldehyde and calcium hydroxide are then introduced in such a quantity that the reaction mixture is maintained at a pH value of from 7.5 to 9.5, preferably from 8 to 9, at a temperature of from 80° to 110° C., preferably from 90° to 105° C. The concentration of formaldehyde is maintained at from 0.5 to 10%, by weight, preferably from 1.2 to 6%, by weight, based on the reaction mixture as a whole, throughout the condensation reaction. Finally, the residual quantity of formaldehyde, amounting to from 0.5 to 10%, by weight, is optionally removed by further condensation at pH values below 7 or by reaction with other compounds that are reactive with formaldehyde hydrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 36 OF 49 USPATFULL on STN
ACCESSION NUMBER: 79:52259 USPATFULL
TITLE: Polyurethane chain-extenders
INVENTOR(S): Marquis, Edward T., Austin, TX, United States
Yeakey, Ernest L., Austin, TX, United States
PATENT ASSIGNEE(S): Texaco Development Corp., White Plains, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4180644 | | 19791225 |
| APPLICATION INFO.: | US 1978-929756 | | 19780731 (5) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.
LEGAL REPRESENTATIVE: Ries, Carl G., Whaley, Thomas H., Bailey, James L.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 510
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Covers certain aromatic-amine amides which comprise the reaction product of an alkylene polyoxypropylene diamine, triamine, or tetramine and an isatoic anhydride of the formula: ##STR1## where R" is selected from the group consisting of hydrogen, alkyl, nitro, halo, hydroxy, amino, and cyano, and n is a number of 1-4. Also covers the use of said compounds

as chain-extenders in polyurethane compositions. Such chain-extenders provide for the production of polyurethane elastomers having improved tensile strength, tear strength and elongation properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 37 OF 49 USPATFULL on STN

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|---|---|---|---|
| ACCESSION NUMBER: | 79:26205 USPATFULL | | |
| TITLE: | Process for the production of low molecular weight polyhydroxyl compounds | | |
| INVENTOR(S): | Muller, Hanns P., Leverkusen, Germany, Federal Republic of<br>Wagner, Kuno, Leverkusen, Germany, Federal Republic of | | |
| PATENT ASSIGNEE(S): | Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 4156636 | | 19790529 |
| APPLICATION INFO.: | US 1978-934567 | | 19780817 (5) |
| | NUMBER | | DATE |
| PRIORITY INFORMATION: | DE 1977-2738512 | | 19770826 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Evans, Joseph E. | | |
| LEGAL REPRESENTATIVE: | Harsh, Gene, Gil, Joseph C. | | |
| NUMBER OF CLAIMS: | 11 | | |
| EXEMPLARY CLAIM: | 1,11 | | |
| LINE COUNT: | 898 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Low molecular weight polyhydroxyl compounds are made from formaldehyde hydrate by an improved process comprising adjusting the pH of an aqueous solution of formaldehyde and co-catalyst to 9-12 with calcium hydroxide at 80°-110° C. to begin condensation and then adding to this reaction mixture aqueous formalin and/or paraformaldehyde and calcium hydroxide to maintain a pH of 7.5-9.5 and temperature of 80°-110° C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 38 OF 49 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 78:59947 USPATFULL | | |
| TITLE: | Catalyst systems containing dimethylamino ether mono-ols for polyurethane foam formation | | |
| INVENTOR(S): | Sandner, Michael Ray, Chappaqua, NY, United States<br>Duffy, Robert Donovan, Summersville, WV, United States | | |
| PATENT ASSIGNEE(S): | Union Carbide Corporation, New York, NY, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 4122038 | | 19781024 |
| APPLICATION INFO.: | US 1977-819331 | | 19770727 (5) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1975-581745, filed on 29 May 1975, now patented, Pat. No. US 4049931 | | |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Garvin, Patrick
LEGAL REPRESENTATIVE: Klosty, Marylin
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 2964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 39 OF 49 USPATFULL on STN
ACCESSION NUMBER: 77:51315 USPATFULL
TITLE: Catalyst systems containing dimethylamino ether mono-ols for polyurethane foam formation
INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States
Duffy, Robert Donovan, Summersville, WV, United States
PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 4049931 | | 19770920 | |
| APPLICATION INFO.: | US 1975-581745 | | 19750529 | (5) |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Czaja, Donald E.
ASSISTANT EXAMINER: Fletcher, H. H.
LEGAL REPRESENTATIVE: Klosty, Marylin
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
LINE COUNT: 3171
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl

group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 40 OF 49 USPATFULL on STN
ACCESSION NUMBER: 76:29069 USPATFULL
TITLE: Novel hydrophobic polyurethane foams
INVENTOR(S): Kehr, Clifton L., Silver Spring, MD, United States
Marans, Nelson S., Silver Spring, MD, United States
PATENT ASSIGNEE(S): W. R. Grace & Co., New York, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3959191 | | 19760525 |
| APPLICATION INFO.: | US 1974-537617 | | 19741230 (5) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1973-322666, filed on 11 Jan 1973, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ivy, C. Warren
LEGAL REPRESENTATIVE: Bond, Eugene M.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 790
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention disclosed is for new improved hydrophobic polyurethane foams prepared by reacting a hydrophobic polyisocyanate reactant with large amounts of an aqueous reactant in the presence of an emulsifying agent. The resultant foams may be characterized with a broad spectrum of improved properties including load-bearing characteristics, hydrophobic properties, textural characteristics and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 41 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1974:65637 USPATOLD
TITLE: MONO AND TRIS(AMINO LOWERALKOXY) (ALKYL) POLYOXYALKYLENE COMPOUNDS AND METHOD OF PREPARATION
INVENTOR(S): POPPELSDORF F
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3799986 | A | 19740326 |
| APPLICATION INFO.: | US 1967-689004 | | 19671201 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1967-689004 | 19671208 |
| | US 1961-107060 | 19610502 |
| | US 1967-688971 | 19671208 |
| | US 1967-688976 | 19671208 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | HIGEL, FLOYD D | |
| LINE COUNT: | 1376 | |

L15 ANSWER 42 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1972:61906 USPATOLD
TITLE: DIACID BRIDGED RING COMPOUNDS
INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3646132 | A | 19720229 |
| APPLICATION INFO.: | US 1969-846251 | | 19690701 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | WEINBERGER, LORRAINE A | |
| ASSISTANT EXAMINER: | GLEIMAN, E J | |
| LINE COUNT: | 1678 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 43 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1972:61815 USPATOLD
TITLE: SYM TRIS (4 PIPERIDYL) CYCLOHEXANES
INVENTOR(S): UELZMANN HEINZ
PATENT ASSIGNEE(S): GENCORP INC.

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3646041 | A | 19720229 |
| APPLICATION INFO.: | US 1970-7310 | | 19700101 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1970-7310 | 19700108 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | JILES, HENRY R | |
| ASSISTANT EXAMINER: | TODD, G T | |
| LINE COUNT: | 749 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 44 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1971:56250 USPATOLD
TITLE: BETA CYANOALKYL ETHERS OF POLYOXYALKYLENE ADDUCTS OF MODERATELY HIGH MOLECULAR WEIGHT
INVENTOR(S): POPPELSDORF FEDOR
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3560549 | A | 19710202 |
| APPLICATION INFO.: | US 1967-688976 | | 19671201 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1961-107060 | 19610502 |
| | US 1967-688971 | 19671208 |
| | US 1967-688976 | 19671208 |
| | US 1967-689004 | 19671208 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: BRUST, JOSEPH P
LINE COUNT: 1584

L15 ANSWER 45 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1970:41512 USPATOLD
TITLE: METHOD FOR MAKING SYM TRIS(4 PYRIDYL) CYCLOHEXANES AND ALKYL SUBSTITUTED SYM TRIS (4 PYRIDYL) CYCLOHEXANES
INVENTOR(S): UELZMANN HEINZ
PATENT ASSIGNEE(S): GENCORP INC.

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3528988 | A | 19700915 |
| APPLICATION INFO.: | US 1967-674760 | | 19671001 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1967-674760 | 19671012 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: RANDOLPH, JOHN D
LINE COUNT: 768
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 46 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1970:4861 USPATOLD
TITLE: NORBORNANE DIISOCYANATES
INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|

| | | | |
|---|---|---|---|
| PATENT INFORMATION: | US 3492330 | A | 19700127 |
| APPLICATION INFO.: | US 1966-520298 | | 19660101 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1965-520298 | 19651209 |
| | US 1969-846251 | 19690730 |
| | US 1969-846256 | 19690730 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: PARKER, CHARLES B
LINE COUNT: 1827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 47 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1969:63192 USPATOLD
TITLE: PHOTOSENSITIZED CYCLOADDING PROCESS
INVENTOR(S): ARNOLD DONALD R
STEHR CHARLES E
TRECKER DAVID J
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3483102 | A | 19691209 |
| APPLICATION INFO.: | US 1964-365527 | | 19640501 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1964-365527 | 19640506 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: WILLIAMS, HOWARD S
LINE COUNT: 1476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 48 OF 49 USPATOLD on STN
ACCESSION NUMBER: 1966:29480 USPATOLD
TITLE: Preparation of cellular isocyanatepolyamino compound reaction products
INVENTOR(S): MAXEY EDWIN M
GMITTER GEORGE T

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 3256213 | A | 19660614 |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1962-198765 | 19620531 |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: BERCOVITZ, LEON L
LINE COUNT: 710

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 49 OF 49 USPAT2 on STN
ACCESSION NUMBER: 2003:325213 USPAT2
TITLE: High performance RIM elastomers and a process for their production
INVENTOR(S): Super, Michael S., Oakdale, PA, United States
Steppan, David D., Gibsonia, PA, United States
Slack, William E., Moundsville, WV, United States
Potts, Bruce H., Beaver, PA, United States
Hurley, Michael F., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6765080 | B2 | 20040720 |
| APPLICATION INFO.: | US 2002-165297 | | 20020606 (10) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 1256
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008

L1 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4 57 S L1 (L) (RANEY (2W) NICKEL)
L5 49 S L4 NOT L3

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L6            45 S L5 AND RATIO
L7            33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
L8          2442 S L1 AND FOAM
L9            54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L10           42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
L11           36 S L10 NOT L3
L12         2320 S FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIX
L13           43 S L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NI
L14           56 S L12 AND (RANEY (2W) NICKEL)
L15           49 S L14 AND HYDROGENATION

=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 08:51:12 ON 17 JUL 2008
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